



SERIES 77 SHRINK BOOTS

Heat Shrink Boots



Material Properties and Fluid Resistance

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Shrink Boot Typical Material Properties

| Property | Type 1 High Performance Elastomer | Type 2 Zero Halogen Polyolefin | Type 3 General Purpose Polyolefin | Type 5 Viton Fluoroelastomer Blend | Type 6 High Performance Elastomer Alloy | Type 7 Flexible Polyolefin | Type 8 Low Outgassing Fluoropolymer Alloy | Type 9 Low Temp Flexible Polyolefin |
|--|--|--|---|---|--|--|--|---|
| Flexibility | Semi-rigid | Semi-flexible | Flexible | Flexible | Flexible | Highly Flexible | Semi-rigid | Flexible |
| Operating Temperature Range | -75°C to +150°C | -40°C to +130°C | -55°C to +135°C | -55°C to +150°C | -55°C to +135°C | -55°C to +135°C | -50° C to +175° C | -40° C to +100° C |
| Shrink Temperature (min.) | 135°C | 120°C | 120°C | 135°C | 135°C | 120°C | 135° | 70° |
| Tensile Strength (psi) | 1700 | 1100 | 1400 | 2200 | 1500 | 1400 | 1700 | 1700 |
| Elongation (% min.) | 400 | 250 | 400 | 400 | 300 | 250 | 300 | 500 |
| Thermal Endurance (Elongation 50% min) | 3000 hrs, 150°C | 3000 hrs, 130°C | -- | -- | -- | -- | -- | -- |
| Heat Shock | 4 hrs, 215°C | 4 hrs, 200°C | 4 hrs, 225°C | 4 hrs, 225°C | 4 hrs, 220°C | 4 hrs, 250°C | 4 hrs, 225°C | 4 hrs, 150°C |
| Heat Aging | 168 hrs, 160°C | 168 hrs, 175°C | 168 hrs, 175°C | 168 hrs, 150°C | 168 hrs, 150°C | 168 hrs, 175°C | 168 hrs, 150°C | 168 hrs, 175°C |
| Dielectric Strength (V/mil) | 300 | 380 | 250 | 200 | 200 | 300 | 200 | 200 |
| Volume Resistivity (ohms-cm) | 10 ¹³ | 10 ¹² | 10 ¹² | 10 ¹⁰ | 10 ¹⁰ | 10 ¹² | 10 ¹⁰ | 10 ¹⁰ |
| Water Absorption (%) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Flammability | Burn Time <15 sec Burn Length <25mm | Burn Time <15 sec Burn Length <25mm | Burn Time <120 sec Burn Length <25mm | Burn Time <120 sec Burn Length <25mm | Burn Time <120 sec Burn Length <25mm | Burn Time <90 sec Burn Length <25mm | Burn Time <60 sec Burn Length <25mm | Burn Time <120 sec Burn Length <25mm |
| RoHS Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Oxygen Index (% min.) | -- | >30% | -- | -- | -- | -- | -- | -- |
| Temperature Index (°C) | -- | >250° C | -- | -- | -- | -- | -- | -- |
| Smoke Index (max.) | -- | <20 | -- | -- | -- | -- | -- | -- |
| Toxicity Index (max.) | -- | <3 Per 100 gms | -- | -- | -- | -- | -- | -- |
| Outgassing | -- | -- | -- | -- | -- | -- | CVCM <0.1% TML <1% | -- |

Shrink Boot Fluid Resistance

| Fluid | Type 1 High Performance Elastomer | Type 2 Zero Halogen Polyolefin | Type 3 General Purpose Polyolefin | Type 5 Viton Fluoroelastomer Blend | Type 6 High Performance Elastomer Alloy | Type 7 Flexible Polyolefin | Type 8 Low Outgassing Fluoropolymer Alloy | Type 9 Low Temp Flexible Polyolefin |
|-------------------|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--|-------------------------------|--|--|
| Lubricating Oil | Very good | Good | Good | Excellent | Excellent | Good | Excellent | Fair |
| Hydraulic Fluid | Very Good | Good | Good | Excellent | Excellent | Good | Excellent | Fair |
| Aviation Fuel | Very Good | Good | Good | Excellent | Excellent | Fair | Excellent | Fair |
| Gasoline | Very Good | Fair | Fair | Excellent | Excellent | Good | Excellent | Fair |
| De-Icing Fluid | Excellent | Very Good | Good | Excellent | Excellent | Good | Excellent | Fair |
| Automotive Diesel | Good | Fair | Very Good | Excellent | Excellent | Fair | Excellent | Fair |